

Creating a Culture Change in your Maintenance Department

By Ricky Smith CMRP, CRL

Changes requires Leadership to have a clear “Vision” of what true change looks like and be able to quantify the value of the change.

“If change were easy every organization would move from an undesirable state to a successful future state”

- Ricky Smith CMRP

Is your maintenance crew in a reactive mindset? Check out a list of qualifiers to find out and then learn how to change it.

It's difficult to manage a maintenance crew effectively in a reactive environment. We're either unaware we're in a reactive mode or we don't know how to get out of it. The following list of qualifiers determines if your crew is reactive:

- PM labor hours stay the same (or increase) and emergency labor hours trend upward.
- PM work orders lack specifications, step by step instructions and other data.
- Yesterday's maintenance problems and reliability issues consume 90% of daily maintenance / production meetings.
- The Maintenance Supervisor is a hero one day and a bad person the next
- The Maintenance Supervisor must work late at least twice a week.
- Maintenance crews don't know what equipment they'll be working on tomorrow.
- The maintenance planner routinely expedites parts for emergency work.
- Equipment reliability issues prevent the plant from operating at targeted capacity and cost.

If these points seem too close to home, you're probably operating in a reactive maintenance environment. The challenges and obstacles you face are many. I know, I was there and faced these issues on a daily basis. The toughest challenge was a cultural one – my maintenance crew was resistant to change.

Now, as a consultant, I find that in many plants neither Production nor Maintenance feel responsible or accountable for equipment reliability. Instead, the maintenance department focuses its effort on time-based PMs that don't work anyway, doing too much too soon and doing too little too late. Remember these words of wisdom: “You know you're in reactive mode when you continue to perform preventive maintenance on equipment that continues to fail”. In addition, I've found some plants never meet capacity projections. In fact, I've seen management formally reduce production projections and even change the name from “projections” to “stretch goals.” Shouldn't we admit that if we have a stretch goal, it really means we don't believe we'll ever meet it? Nevertheless, as maintenance and manufacturing costs continue to rise for no apparent reason, maintenance comes under pressure to do something quickly.

So, quick fixes are tried and tried again, but they never really work reliably.

So how do you get out of a downward spiral and move your crew from reactive to proactive? I changed my crew's behavior by convincing and proving to them that there was a better way – being proactive in maintenance. And, I had to convince them there was an easy way to get there, and they would benefit personally from the change.

Before starting this culture change initiative, I had to gain support and sponsorship from plant management. The only way to get that prerequisite is to develop a compelling business case. Believe me, it will be compelling – a reactive environment leaves big dollars sitting on the table. Moving from reactive to proactive will reduce maintenance costs by a large amount however let's not be naive, you cannot expect to reduce maintenance without investing in this change and it depends on the severity of the problem or problems.

No organization can move from a "Reactive Culture" to a "Proactive Culture" without an investment. If you think you can go to a bank (any bank) and ask for money, they will tell you that if you do not put money in the bank you get nothing back.

Here are the facts:

- **Best in Class Maintenance Cost 1.7-3.4% RAV (Replacement of Asset Value)**
- **Typical Maintenance Cost 6-9% RAV**
- **Worst in Class Cost 10% up RAV**

RAV also referred to as Estimated Replacement Value (ERV). This is the dollar value that would be required to replace the production capability of the present assets in the plant. Include production/process equipment, as well as utilities, facilities and related assets. Do not use the insured value or depreciated value of the assets. Include replacement value of buildings and grounds if these assets are maintained by the maintenance expenditures. Do not include the value of real estate, only improvements. Source: SMRP Definitions

In addition, capacity will increase because you're improving reliability. I've seen asset reliability raise capacity by as much as 20% to 35%.

Then, armed with management support, I needed true believers. I had to prove to my crew that life was better in a proactive environment. To make the biggest impact quickly, we took one of our worst performing assets and focused on changing our process to improve its reliability. We changed the day-to-day activities and behaviors of the people in Maintenance and Operations and ensured that people understood what to do.

The people who operated and maintained the asset owned and executed the asset reliability program, conducting proactive inspections at designated frequencies. We got some expert help in developing the asset reliability program (there are many work identification methodologies available). We didn't invest in heavy statistical analyses, nor did we use an abundance of additional predictive technologies, but we validated those we had in place when we developed the asset reliability program to ensure we were focused on the right work.

Within six months, we had tuned up the reliability and performance of that asset. We put key performance indicators in place to manage the process and kept it going. The team knew they were successful and they felt great. The change had occurred. Sure, it was only one asset, but now others wanted a ride on our success train.

You don't have to tolerate managing maintenance in a reactive mode. Developing a proactive asset reliability program and focusing on a process to implement it is the key to success in changing from a reactive organization to a proactive one.

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